

What Is Claimed Is:

1. A head positioning control method for a storage disk device which comprises;

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a storage disk that stores a position signal;

a plurality of heads that read information from the said storage disk;

an actuator that moves the said head; and

a control circuit that positions the said head based on the position signal read from the said storage disk using a selected head, said method comprising:

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a step of synchronizing a time of a detection signal for detecting said position signal with a time of said position signal read by head to which switching is directed, in response to a head switching cue;; and

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a step of reading said position signal for said head in response to said synchronized detection signal and positioning the said head according to said read position signal.

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2. The head positioning control method for a storage disk device of Claim 1, wherein said synchronizing step comprises:

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a step of determining a time at which the head to which said switching is directed reads said position signal, in response to said head switching cue; and

a step of synchronizing the time of said

~~3.~~ detection signal with said determined time.

5 ~~3. The head positioning control method for a~~
storage disk device of Claim 2, wherein said time
determining step comprises a step for determining said
time of a value greater than one sample period for said
positioning control.

10 4. The head positioning control method for a
storage disk device of Claim 2 wherein said time
determining step includes a step for reading the time read
by the head to which said switching is directed from a
memory for storing the time at which the position signal
for each head is read.

15 ~~5. The head positioning control method for a~~
storage disk device of Claim 2, wherein said time
determining step comprises a step for determining the time
difference between the detection time of said position
signal for the head from which said switching originates
and the detection time of said position signal for the
head to which said switching is directed,

20 and wherein said synchronizing step comprises a step
for time-shifting the said detection signal for said time
25 difference.

6. The head positioning control method for a

~~storage disk device of Claim 5, wherein said time~~
determining step comprises:

5 a step of determining the detection time of said
position signal for the head from which said switching
originates;

a step of determining the detection time of said
position signal for the head to which said switching is
directed; and

10 a step of determining the time difference between the
two detection times.

7. The head positioning control method for a
storage disk device of Claim 1, wherein said positioning
step comprises:

15 a step of calculating, in response to said head
switching cue, the time difference between the detection
time for the head from which the said switching originates
and the detection time for the head to which said
switching is directed;

20 a step of determining whether or not the said time
difference is shorter than one sample interval; and

a step of inhibiting positioning in response to said
detection signal when said time difference is shorter than
one sample interval.

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8. A head positioning control device for a storage
disk apparatus, comprising;

10. ~~The head positioning control device for a storage disk apparatus of Claim 9, wherein said synchronization circuit comprises a circuit that determines said time the value of which is greater than one sample period for said positioning control.~~

11. The head positioning control device for a storage disk apparatus of Claim 9, wherein said synchronization circuit comprises memory for storing the times at which the position signals of each head are read.

12. ~~The head positioning control device for a storage disk apparatus of Claim 9, wherein said synchronization circuit comprises:~~

a circuit that determines the time difference between the detection time of said position signal for the head used prior to switching and the detection time of said position signal for the head to which said switching is directed; and

a circuit that shifts in time said detection signal by that time difference.

13. The head positioning control device for a storage disk apparatus of Claim 11, wherein said synchronization circuit comprises a circuit for determining from said memory the detection time of said position signal for the head used prior to said switching

~~and the detection time of the said position signal for the~~
head to which said switching is directed, and calculating
the time difference between the two detection times.

- 5 14. The head positioning control device for a
storage disk apparatus of Claim 8, wherein said processing
circuit comprises a circuit that determines whether or not
the time difference between the detection time for head
used prior to said switching and the detection time for
the head to which said switching is directed is less than
one sample interval and that, when said time difference is
shorter than one sample interval, inhibits positioning in
response to said detection signal.